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APPLICATION NO	).	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/808,929		03/25/2004	Leo E. Thompson	7512-73238-01	6889	
24197	7590	09/05/2006		EXAM	EXAMINER	
KLARQI	ЛЅТ SPA	RKMAN, LLP	KRECK,	KRECK, JOHN J		
121 SW S SUITE 16	ALMON S	TREET	ART UNIT	PAPER NUMBER		
	PORTLAND, OR 97204			3673	3673	
				DATE MAILED: 09/05/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/808,929	THOMPSON ET AL.				
Office Action Summary	Examiner	Art Unit				
	John Kreck	3673				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period versillure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 10 Ju	<u>uly 2006</u> .					
,	,					
, ==	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ⊠ Claim(s) 1-54 is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 1-27,32-42 and 44-54 is/are rejected.  7) ⊠ Claim(s) 28-31 and 43 is/are objected to.  8) □ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 3/25/04 is/are: a) ☐ accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Example 2.	cepted or b) $\boxtimes$ objected to by the drawing(s) be held in abeyance. See ion is required if the drawing(s) is object to be in the drawing $\otimes$	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)	4)  Interview Summary Paper No(s)/Mail Do 5)  Notice of Informal F	ate				
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/808,929 Page 2

Art Unit: 3673

#### **DETAILED ACTION**

Applicant's election without traverse of claims 1-54 (method) in the reply filed on
 7/10/06 is acknowledged.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the slip form must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4. Claims 32-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - a. Claim 32 recites the limitation "the slip form" in line 2. There is insufficient antecedent basis for this limitation in the claim.
  - b. Claim 34 recites the limitation "the slip form" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 22-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to disclose the additives claimed in claims 22-24.

Application/Control Number: 10/808,929

Art Unit: 3673

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4-6,15, 17, 27, 36, 44-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Meininger, et al. (U.S. Patent number 4,581,163).

Meininger plainly discloses the process including placing materials into a container; heating until melting; and allowing the melt to cool as called for in claim 1. See col. 2, lines 48-62.

Claim 2: see col. 5, line 55.

Claim 4: see col. 2, line 48 ("optionally").

Claim 5: see fig 1, refs# 13, 23, etc.

Claim 6: see col. 2, line 62 and 5:55.

Claim 15: see col. 2, line 22.

Claim 17: see col. 2, line 21.

Claim 27: see col. 5, line 27.

Claim 36: see col. 4, line 10.

Application/Control Number: 10/808,929

Art Unit: 3673

With regards to claims 44-46; the term "soil" is given a broad interpretation consistent with its use in the specification, see, e.g. paragraph 14 of applicant's disclosure. Meininger teaches such materials in col. 4, lines 38-col. 5, line10.

Claim 47: see col. 2, line 51.

Claim 48: see col. 4, lines 38-col. 5, line10.

Claim 49: see col. 4, lines 38-col. 5, line10.

Claim 50: see col. 2, line 34-35.

Claim 51: see col. 2, line 34-35.

Claim 52: see col. 5, line 23.

Claim 53: see col. 5, line 23.

## Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meininger

Meininger lacks explicit disclosure of insulation "board".

Official Notice is taken of the fact that insulation "boards" are well known, and are known to have advantages, such as ease of construction/assembly. One of ordinary

Application/Control Number: 10/808,929

Art Unit: 3673

skill in the art would have found it obvious to have modified the Meininger process to have included insulating board as called for in claim 16.

9. Claims 3, 7, 8, 26, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meininger in view of Chapman (U.S. Patent number 5,443,618).

Meininger lacks any disclosure of temperature, and thus fails to teach the temperature in the range of 1400-2000°C.

Chapman (col. 5, line 10) discloses that in a similar process, a temperature in that range is needed.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Meininger process to have included a temperature as called for in claim 3.

Meininger lacks the removable electrodes.

Chapman(col. 8, line 15-16) teaches the use of removable electrodes in a similar process. One of ordinary skill in the art would have recognized the advantages of removable electrodes (e.g. allowing for replacement an/or reuse of the electrodes.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Meininger process to have included removable electrodes as called for in claim 7.

With regards to claim 8; Meininger lacks the starter path.

Applicant's own disclosure indicates that such starter paths are conventional (paragraph 3); thus one of ordinary skill in the art would have found a starter path obvious.

With regards to claim 26: Meininger lacks the "passively" added material.

Chapman (e.g. figure 1, near 42, and column 5, lines 25-28) discloses passively adding material. One of ordinary skill in the art would have recognized that passive adding would have been advantageous, because it would prevent loss of heat (i.e. the heaped material would absorb some of the heat which would otherwise have escaped through the top). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Meininger process to have included passive adding material as called for in claim 26.

With regards to claim 54: Meininger lacks the "passively" added material.

Chapman (e.g. figure 1, near 42, and column 5, lines 25-28) discloses passively adding material. One of ordinary skill in the art would have recognized that passive adding would have been advantageous, because it would prevent loss of heat (i.e. the heaped material would absorb some of the heat which would otherwise have escaped through the top). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Meininger process to have included passive adding material as called for in claim 54.

10. Claims 9-13, 18-21, 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Meininger in view of either one of WO03/026745A1 or Spector (U.S. Patent number 3,110,557).

Meininger plainly discloses the process including placing materials into a container; heating until melting; vitrifying without removing, and discarding. See col. 2, lines 48-62.

Meininger lacks any disclosure of temperature, and thus fails to teach the container which can withstand 2000°C.

Each of WO03/026745A1 and Spector teach similar processes in which the temperature reaches 2000°C. One of ordinary skill in the art would have been aware that using a container which can withstand such temperatures is desirable and obvious, in order to prevent catastrophic failure.

Claim 10: see Meininger col. 3, lines 19-20.

With regards to claim 11: Meininger discloses the electrodes "in the vicinity of the furnace lining" (col. 4, liens 9-10). This suggests to one of ordinary skill in the art that the device is not connected to the container.

Claim 12: see Meininger col. 2, lines 51.

Claim 13: see Meininger col. 5, lines 53-55.

Claim 18: see Meininger col. 4, line 5.

Claim 19: see Meininger col. 4, lines 42-43.

With regards to claim 20: Applicant's own disclosure indicates that such additives are conventional (paragraph 3); thus one of ordinary skill in the art would have found such additives obvious.

Claim 21: see Meininger col. 5, lines 1-5.

With regards to claim 25: each of WO03/026745A1 and Spector teach such temperatures.

11. Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meininger in view of Hansen, et al. (U.S. Patent number 6,120,430).

Meininger lacks the vessels. Hansen teaches that in a similar process, a mixture of waste drums and soil (col. 4, lines 57-59) can be treated. One of ordinary skill in the art would have recognized the advantages of treating waste in vessels (drums) since the waste would not have to be removed, thereby reducing risk of contamination. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Meininger process to have included material in vessels and soil as called for in claims 37-39.

12. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meininger and WO03/026745A1 or Spector (U.S. Patent number 3,110,557) as applied to claim 9, and further in view of Hansen, et al. (U.S. Patent number 6,120,430).

Meininger lacks the vessels. Hansen teaches that in a similar process, a mixture of waste drums and soil (col. 4, lines 57-59) can be treated. One of ordinary skill in the

art would have recognized the advantages of treating waste in vessels (drums) since the waste would not have to be removed, thereby reducing risk of contamination. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Meininger process to have included material in vessels and soil as called for in claims 40-42.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meininger and WO03/026745A1 or Spector (U.S. Patent number 3,110,557) as applied to claim 9, and further in view of Powell, et al. (U.S. Patent number 5,678,237).

Meininger lacks the removing vitrified material.

Powell teaches a similar process, which includes removing the vitrified material.

One of ordinary skill in the art would have found it obvious to have further modified the Meininger process to have included removing, in order to allow for reuse of the container.

14. Claims 28-31, and 43 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042. The examiner can normally be reached on Mon-Thurs 530am-2pm; Fri: telework.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Kreck Frimary Examiner Art Unit 3673

31 August 2006